What I learned

During this experiment I got a deeper understanding of a voltaic battery and learned more about how to make it more efficient. While Kevin and I were conducting our experiment, we deduced, based on our results that the lower the sugar level in a carbonated beverage the higher the current and voltage that are generated. If sugar were to be the only determinant, which we can't say for sure, then that would mean that carbonated water with no sugar would generate more current and voltage than carbonated water with sugar. I believe that there might be other factors or ingredients that could influence the results. Factors could include carbonation level in a beverage, how much of a specific ingredient was in the carbonated beverage, or maybe the combinations of two or more factors. The only way to know is by conducting the same experiment but to test for different ingredients. This was a limiting factor during the analysis. Another limiting factor was that when we were trying to observe the volt/amp reading on the multi-meter display it kept rapidly increasing and didn’t stop until we finally gave up, around five minutes later. It is obvious that the reading would have to stabilize at some point because it would be impossible for a liquid to keep generating an increasing flow of electric power. This means that to get the most accurate result, we should have waited for as long as possible in order to find a somewhat stable reading. This experiment was easy to conduct but it was hard to analyze. We did not have the means to test for every factor, such as carbonation levels, but based on the limited experimental approach we have taken, we were able to conclude that sugar level in a carbonated beverage is directly proportional to the voltage/amperage produced by a voltaic battery.